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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 10/682,591 | 10/09/2003 | Joseph J. Kubler | 14364US02 | 9764 |

23446 7590 02/14/2005

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| EXAMINER | |
|---|---|
| VINCENT, DAVID ROBERT | |
| ART UNIT | PAPER NUMBER |
| 2661 | |

DATE MAILED: 02/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) |
|---|---|---|
| | 10/682,591 | KUBLER ET AL. |
| | Examiner | Art Unit |
| | David R Vincent | 2661 |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3,5,7,9,13-21* is/are rejected.

7)☒ Claim(s) *2,4,6,8 and 10-12* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 7 is rejected under 35 U.S.C. 102(b) as being anticipated by Bodin (US 5,301,356).

As shown in e.g., Figs. 1-3, or 7, Bodin discloses a plurality of mobiles (M1-M10, Fig. 1 and respective disclosure), each converting analog voice (normal human speech) into digital voice packets and visa versa (col. 4, lines 62-67; col. 5, line 38-col. 8, line 16; or Fig. 2; using TDMA or CDMA packets), mobiles convert data packets to analog data (not all data is voice data, some has to be control data, e.g., control channel messages, col. 7, lines 39-54), a plurality of access devices (Base Stations/BS B1-B10, Figs. 1 and 3, or respective disclosure), access devices (BSs) using polling to manage wireless routing (e.g., col. 11, lines 11-23), as specified in claim 7.

### *Claim Rejections - 35 USC § 102*

> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another

> who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 15-16, 18, 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Lin (US 5,635,980).

As shown in Figs. 1-2, Lin discloses a voice stream network (PSTN, Fig. 1, and respective disclosure, e.g., col. 5, lines 17-25), a voice packet network (col. 5, lines 18-21; 106, Fig. 1; video comprising voice and data, col. 2, line 40-col. 3, line 19; or cols. 5-7, e.g., col. 5, lines 26-36), a first network device (analog phone, Figs. 1-2; col. 5, lines 18-21), a second device which converts voice from analog to digital (100, Figs. 1-2 and respective disclosure, especially col. 5), telephone switching network (PSTN, Figs. 1-2), second device is an access device (100, col. 5), as specified in claims 15-16, 18, and 21.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin as applied to claims 15, and 18, above, and further in view of Cheung (US 5,812,531).

Lin discloses also an internet switching network (106, col. 2, line 40-col. 3, line 19). However, Lin fails to particularly call for the second device to be a computer.

It is obvious that device 100 in Lin has the capabilities of a computer and is a computer but rather than just argue that any device with a microprocessor and the appropriate memory is a computer (since the applicant did not further define the term computer), the examiner is using a second reference.

Cheung teaches that access points can be computers (AP1, AP2, Figs. 1-4 and respective disclosure, e.g., col. 3, lines 44-45) which update the topology (e.g., col. 4, lines 52-67; col. 6, line 48-col. 8, line 12) and are connected to a packet network or internet (col. 5, lines 51-52; LAN; col. 1, lines 11-33).

It would have been obvious for the CPE in Lin to be a computer because Cheung teaches that computers can be used as access devices in a wireless environment and by making the CPE in Lin wireless, the phone (Lin: 101) could also be wireless or cellular so that it is mobile.

### *Claim Rejections - 35 USC § 103*

6. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Lin and Cheung as applied to claims 15-16 above, and further in view of Bodin (US 5,301,356).

The combination of Lin and Cheung fails to particularly call for polling and/or spanning tree.

Bodin teaches that it is well known to use a polling protocol (e.g., col. 11, lines 3-26).

It would have been obvious to add polling to the combination of Lin and Cheung because the combination discloses using a plurality of wireless access points and roaming (Cheung). This is the same reason that Bodin uses polling; so that mobiles could poll devices to see if a channel is available during a roaming or handoff procedure. This allows the mobile to know if the call will be dropped or continued.

It is notoriously well known to use spanning tree routing as taught by the Marin textbook.

Since the combination of Lin, Cheung and Bodin discloses using LANs (Cheung: col. 5, lines 51-52; LAN; col. 1, lines 11-33) and updating the topology (Cheung: e.g., col. 4, lines 52-67; col. 6, line 48-col. 8, line 12), it would have been obvious to use spanning tree (Martin) for the purpose of avoiding loops in a network.

### ***Claim Rejections - 35 USC § 103***

7. Claims 9, and 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bodin as applied to claim 7 above, and further in view of Papadopoulos (US 5,602,836).

Although Bodin discloses having the PSTN connected to the BS via the MSC (e.g., col. 1, lines 13-25; col. 4, lines 51-67) Bodin fails to particularly call for a telephone connected to one access device, as specified in claims 9 and 13.

Papadopoulos teaches a telephone connected to one access device (PSTN connected directly to access device/BS, Fig. 1 or col. 3, lines 45-54; col. 14, lines 27-30), as specified in claims 9 and 13.

It would have been obvious to connect the PSTN to the BS since it is obvious that a service provider who builds and installs a MSC can just as well pick a site that would be good to install a BS at. When a BS goes down, a technician must drive to the location to repair it. If one BS is at the MSC location, e.g., on the roof of the building where the MSC is, that is one less BS that a technician would have to drive to in the event of a failure. It is certainly obvious to connect analog land line phones to the BS either via the MSC or directly at the BS site. When setting up a BS, a technician is working at a site where there may be no cellular coverage. It makes sense to have a land line installed at the BS for the technician. Also it is obvious if not inherent that analog phones are connected to the BS via the PSTN.

### ***Claim Rejections - 35 USC § 103***

8. Claims 1 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bodin (US 5,301,356).

As shown in e.g., Figs. 1-3, or 7, Bodin discloses a plurality of mobiles (M1-M10, Fig. 1 and respective disclosure), having a buffer (inherent in speech decoder 119, Fig. 2 for the process of converting analog to digital by sampling and quantizing etc.) each mobile converting analog voice (normal human speech) into digital voice packets and visa versa (col. 4, lines 62-67; col. 5, line 38-col. 8, line 16; or Fig. 2; using TDMA or CDMA packets), mobiles convert data packets to analog data (not all data is voice data, some has to be control data, e.g., control channel messages, col. 7, lines 39-54), a stationary device (Base Station/BS B1-B10, Figs. 1 and 3, or respective disclosure), a wireless network (Fig. 1), hardwired network connected to both stationary device and wireless device (TDMA MSCs, Fig. 4) a telephone connected to stationary device (PSTN connected to the BS via the MSC e.g., col. 1, lines 13-25; col. 4, lines 51-67), stationary device having a buffer (circuit in BS, Fig. 3 is similar to circuit in mobile, Fig. 2; col. 4, lines 62-67; col. 5, line 38-col. 8, line 16; or Fig. 2; using TDMA or CDMA packets), and having the stationary device provide call set up assistance (Fig. 7 and respective disclosure, e.g., col. 11, lines 3-51; any device/node in the circuit between the end points, has to provide setup assistance by passing messages allowing the circuit to be set up).

Although Bodin discloses queuing (col. 3, lines 6-24) and using filtering (e.g., col. 7, lines 64-68) Bodin fails to specify details of the memory used in the speech decoders and as such fails to particularly call for a predetermined queuing period, as specified in claim 1.

Huang teaches a predetermined queuing period (e.g., col. 3, lines 16-42, especially line 25), as specified in claim 1.

It would have been obvious to mitigate the effects of jitter by using at least one or various queuing periods as in

Huang, because packets can arrive at varying times and speech can be distorted. Doing so can make the reproduced speech sound more natural.

Although the combination of Bodin and Huang discloses having the PSTN connected to the BS via the MSC (Bodin: e.g., col. 1, lines 13-25; col. 4, lines 51-67) the combination fails to particularly call for a telephone connected to one access device, as specified in claims 1.

Papadopoulos teaches a telephone connected to one access device (PSTN connected directly to access device/BS, Fig. 1 or col. 3, lines 45-54; col. 14, lines 27-30), as specified in claims 9 and 13.

It would have been obvious to connect the PSTN to the BS since it is obvious that a service provider who builds and installs a MSC can just as well pick a site that would be good to install a BS at. When a BS goes down, a technician must drive to the location to repair it. If one BS is at the MSC location, e.g., on the roof of the building where the MSC is, that is one less BS that a technician would have to drive to in the event of a failure. It is certainly obvious to connect analog land line phones to the BS either via the MSC or directly at the BS site. When setting up a BS, a technician is working at a site where there may be no cellular coverage. It makes sense to have a land line installed at the BS for the technician. Also it is obvious if not inherent that analog phones are connected to the BS via the PSTN.

Regarding whether a phone is connected to a BS via a MSC or more directly, it is worth noting that making features or inventions integral (see In re Larson, 144 USPQ 347 (CCPA 1965) and Howard v. Detroit Stove Works, 150 U.S. 164 (1893)); making features/inventions separable (Nerwin v. Erlichman, 168 USPQ 177) and shifting the location of parts does not make an invention patentable (see In re Japikse, 86 USPQ 70 (CCPA 1950).

Therefore, it is obvious that an MSC and BS can be integrated in the same building or rack (of circuit boards).

1. Claims 2, 4, 6, 8, 10-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David R Vincent whose telephone number is 571 272 3080. The examiner can normally be reached on M-TH.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on 571 272 3126. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

2/7/05
David R Vincent
Primary Examiner
Art Unit 2661

February 7, 2005